REMARKS

Claims 1-3 and 5-17 are pending in the present application. Claim 4 has been cancelled without prejudice or disclaimer to the subject matter contained therein. The specification and drawings have been amended. No new subject matter has been added.

Rejection under 35 U.S.C. §103

Claims 1 and 7-16 have been rejected under 35 U.S.C. §103 as being unpatenable over Newman et al. (Published US Patent Application 2003/0020727) in view of Yamamoto (Published US Patent Application 2002/0158933). This rejection under 35 U.S.C. §103 is respectfully traversed.

In formulating the rejection under 35 U.S.C. §103, the Examiner alleges that Newman et al. discloses producing a target consisting of pairs of metamers, where each pair matches for one illuminant and mismatches for others (Figures 4 and 6 and paragraphs [0045]-[0059], [0063], [0064], and [0067] of Newman et al.). However the Examiner recognizes that Newman et al. fails to disclose viewing the target under the illumination for which characterization is desired; selecting a best match from the metameric pairs, which estimates the viewing illumination; entering an indicator of the estimated viewing illumination; and adjusting the characterization data to correspond to the estimated viewing illumination.

To meet these deficiencies in Newman et al., the Examiner cites the teachings of Yamamoto. The Examiner alleges that Yamamoto discloses, at paragraphs **[0060]**-[0073], viewing the target under the illumination for which characterization is desired; selecting a best match from the metameric pairs, which estimates the viewing illumination; entering an indicator of the estimated viewing illumination; and adjusting the characterization data to correspond to the estimated viewing illumination.

Based upon these allegations, the Examiner concludes that Newman et al. in view of Yamamoto would render the presently claimed invention obvious. These allegations and conclusion are respectfully traversed.

As set forth above, independent claim 1 recites a method for improving printer characterization to more accurately reproduce desired colors on a destination printing device given the ambient illumination at the location where the printer's output is intended to be viewed. The method produces a target consisting of pairs of metamers, where each pair matches for one illuminant and mismatches for others; views the target under the illumination for which characterization is desired; selects a best metameric pair match from the metameric pairs, which estimates the viewing illumination; enters an indicator of the estimated viewing illumination; and adjusts the characterization data to correspond to the estimated viewing illumination.

In contrast, as recognized by the Examiner, Newman et al. fails to disclose, in Figures 4 and 6, viewing the target under the illumination for which characterization is desired and utilizing this viewing of the target under the illumination for which characterization is desired to select one of the metameric pairs.

With respect to Yamamoto, the Examiner asserts that Yamamoto teaches viewing the target under the illumination for which characterization is desired and selecting a best metameric pair match from the metameric pairs, which estimates the viewing illumination. This assertion by the Examiner is contrary to the actual teachings of Yamamoto.

More specifically, Yamamoto discloses, at paragraphs **[0067]**, **[0067]**, and **[0068]**, that the spectral reflectance of the gray color patches are measured under a standard light D50 and a standard light A to create tristimulus values $(X,Y,Z)_{D50}$ and $(X,Y,Z)_A$. Yamamoto further discloses that the created tristimulus values are used to calculate a color difference, ΔE, of L*a*b* color space. The color difference, ΔE, is used to select the gray color patches which are used in generating a color conversion look-up table (LUT).

As disclosed in Yamamoto, Yamamoto fails to disclose that the target is actually viewed under the illumination for which characterization is desired prior to selecting the metameric pair. More specifically, Yamamoto teaches that the spectral reflectance of the gray color patches are measured under two standard light sources, D50 and A.

In other words, Yamamoto fails to teach or suggest any observation of the target under the illumination for which characterization is desired so that a best metameric pair match from the metameric pairs, which estimates the viewing illumination, is selected, as set forth by independent claim 1, because the color conversion LUT is generated based on a difference relationship between measured spectral reflectance of the gray color patches under two standard light sources.

Yamamoto fails to teach or suggest that the calculated color difference, ΔE, provides a best metameric pair match from the metameric pairs, which estimates the viewing illumination.

Therefore, contrary to the Examiner's assertion, Yamamoto fails to teach or suggest viewing the target under the illumination for which characterization is desired and selecting a best metameric pair match from the metameric pairs, which estimates the viewing illumination, as set forth by independent claim 1.

In summary, the Examiner recognizes that Newman et al. fails to teach or suggest viewing the target under the illumination for which characterization is desired and selecting a best metameric pair match from the metameric pairs, which estimates the viewing illumination.

Moreover, Yamamoto fails to teach or suggest viewing the target under the illumination for which characterization is desired and selecting a best metameric pair match from the metameric pairs, which estimates the viewing illumination, as set forth by independent claim 1.

Therefore, the combined teachings of Newman et al. and Yamamoto fail to teach or suggest viewing the target under the illumination for which characterization is desired and selecting a best metameric pair match from the metameric pairs, which estimates the viewing illumination, as set forth by independent claim 1.

With respect to dependent claims 2, 3, 5, and 7-16, the Applicant, for the sake of brevity, will not address the reasons supporting patentability for these individual dependent claims, as these claims depend directly or indirectly from allowable independent claim 1. The Applicant reserves the right to address the patentability of these dependent claims at a later time, should it be necessary.

Accordingly, in view of the remarks set forth above, the Examiner is respectfully requested to reconsider and withdraw the rejection under 35 U.S.C. §103.

Rejection under 35 U.S.C. §103 over Newman et al. in view of Official Notice

Claim 6 has been rejected under 35 U.S.C. §103 as being unpatentable over Newman et al. (Published US Patent Application 2003/0020727) in view of Yamamoto (Published US Patent Application 2002/0158933) and Examiner's Official Notice. This rejection under 35 U.S.C. §103 is respectfully traversed.

With respect to dependent claim 6, the Applicant, for the sake of brevity, will not address the reasons supporting patentability for this individual dependent claim, as this claim depends directly or indirectly from allowable independent claim 1. The Applicant reserves the right to address the patentability of this dependent claim at a later time, should it be necessary.

Accordingly, in view of the remarks set forth above, the Examiner is respectfully requested to reconsider and withdraw the rejection under 35 U.S.C. §103.

CONCLUSION

Accordingly, in view of all the reasons set forth above, the Examiner is respectfully requested to reconsider and withdraw the present rejection. Also, an early indication of allowability is earnestly solicited.

Respectfully submitted,

Michael J. Nickerson
Registration Number: 33,265
Basch & Nickerson LLP
1777 Penfield Road
Penfield, New York 14526
Telephone: (585) 899-3970
Customer No. 75931

MJN/mjn

-11-